AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.   (Currently Amended) An image-processing device comprising:

a solid-state image pickup element provided with a plurality of unit pixels, each unit pixel including a photo diode and ~~a plurality of~~ <u>at least one</u> transistors for detecting an optical signal; <u>and</u>

a circuit for changing a gate-applied voltage that changes a voltage applied to each gate of a plurality of the transistors;

~~a first voltage source coupled to the circuit for changing gate-applied voltage;~~ ~~and~~

~~a second voltage source coupled to the circuit for changing gate-applied~~ ~~voltage;~~

wherein the circuit for changing a gate-applied voltage applies at least one of a predetermined voltage to each gate of a plurality of the transistors from ~~the~~ <u>a</u> first voltage source while in an accumulation state when carriers are generated from the photo diode in response to received light, and another predetermined voltage from ~~the~~ <u>a</u> second voltage source <u>to the gates of the plurality of transistors</u> while in a reading out state when a signal in response to carriers accumulated in the accumulation state is read out.

2.   (Currently Amended) An image-processing device according to claim 1 ~~further comprising:~~

~~a third voltage source coupled to the circuit for changing gate-applied voltage;~~

wherein the circuit for changing a gate-applied voltage applies a third predetermined voltage to each gate of a plurality of the transistors from ~~the~~ a third voltage source while in a clearing state when residual carriers in the solid-state image pickup device are excluded from the solid-state image pickup device.

3.   (Original)   An image-processing device according to claim 1 further comprising:

a plurality of gate voltage supplying circuits coupled to the gates of a plurality of the transistors;

wherein the changed applied voltage is applied to a plurality of the gate voltage supplying circuits from the circuit for changing a gate-applied voltage.

4.   (Original)   An image-processing device according to claim 1 further comprising:

a plurality of gate voltage supplying circuits coupled to the gates of a plurality of the transistors;

wherein each of a plurality of the gate voltage supplying circuits includes the circuit for changing a gate-applied voltage.

5.   (Currently Amended)   A method of image-processing that picks up an image with a solid-state image pickup element provided with a plurality of unit pixels, each unit pixel including a photo diode and a~~ plurality of~~ at least one transistors for detecting an optical signal, the method comprising:

applying a predetermined voltage to each gate of a~~ plurality of~~ the transistors from a first voltage source while in an accumulation state when carriers are generated from the photo diode in response to received light; and

applying a predetermined voltage to each gate of a~~ plurality of~~ the transistors from a second voltage source while in a reading out state when a signal in response to carriers accumulated in the accumulation state is read out.

6.   (Currently Amended) A solid-state image pickup device comprising:

a solid-state image pickup element provided with a plurality of unit pixels, each unit pixel including a photo diode and a~~ plurality of~~ at least one transistors for detecting an optical signal;

a circuit for changing a gate-applied voltage that changes a voltage applied to each gate of a plurality of the transistors; and

a regulator that produces a first voltage and a second voltage;

wherein the circuit for changing gate-applied voltage applies at least one of the first voltage output from the regulator to each gate of a plurality of the transistors while in an accumulation state when carriers are generated from the photo diode in response to received light, and the second voltage output from the regulator to each gate of a plurality of the transistors while in a reading out state when a signal in response to

carriers accumulated in the accumulation state is read out, wherein the circuit for changing gate-applied voltage selectively applies the first and second voltage outputs based on an accumulation enable signal and a reading out enable signal, respectively.